

IN THE SPECIFICATION

Please amend paragraphs [00173], [00177], [00179] and [00180] in the specification as shown below.

**[00173]** On the downlink, at access point 110x, a transmit (TX) data processor 710 receives traffic data (i.e., information bits) from a data source 708 and signaling and other information from a controller 730 (which may utilize, e.g., memory 732) and possibly a scheduler 734. These various types of data may be sent on different transport channels. TX data processor 710 “frames” the data (if necessary), scrambles the framed/unframed data, encodes the scrambled data, interleaves (i.e., reorders) the coded data, and maps the interleaved data into modulation symbols. For simplicity, a “data symbol” refers to a modulation symbol for traffic data, and a “pilot symbol” refers to a modulation symbol for pilot. The scrambling randomizes the data bits. The encoding increases the reliability of the data transmission. The interleaving provides time, frequency, and/or spatial diversity for the code bits. The scrambling, coding, and modulation may be performed based on control signals provided by controller 730 and are described in further detail below. TX data processor 710 provides a stream of modulation symbols for each spatial channel used for data transmission.

**[00177]** An RX data processor 770 receives and demultiplexes the recovered symbols into their respective transport channels. The recovered symbols for each transport channel may be symbol demapped, deinterleaved, decoded, and descrambled to provide decoded data for that transport channel. The decoded data for each transport channel may include recovered packet data, messages, signaling, and so on, which are provided to a data sink 772 for storage and/or a controller 780 (which may utilize, e.g., memory 782) for further processing.

**[00179]** For the downlink, at each active user terminal 120, RX spatial processor 760 further estimates the downlink to obtain channel state information (CSI). The CSI may include channel response estimates, received SNRs, and so on. RX data processor 770 may also provide the status

of each packet/frame received on the downlink. A controller 780 (and, possibly, memory 782) receives the channel state information and the packet/frame status and determines the feedback information to be sent back to the access point. The feedback information is processed by a TX data processor 790 and a TX spatial processor 792 (if present), conditioned by one or more modulators 754, and transmitted via one or more antennas 752 back to the access point. TX data processor may also receive data (e.g., information bits) from a data source 788.

[00180] At access point 110, the transmitted uplink signal(s) are received by antennas 724, demodulated by demodulators 722, and processed by an RX spatial processor 740 and an RX data processor 742 in a complementary manner to that performed at the user terminal. The recovered feedback information is then provided to controller 730 (and, possibly, memory 732) and a scheduler 734. The decoded data may be provided to a data sink 744.